EPA's Role in the Site Remediation and Cleanup Program at SRS

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Overview

- Introduce EPA
- Origin of Superfund
- How Superfund applies to SRS
- EPA's involvement in SRS remediation program



United States Environmental Protection Agency (EPA)

mission:

To protect human health and the environment

- independent agency formed in 1970
- Congress writes environmental laws
- EPA writes regulations to implement laws
- EPA enforces regulations
- EPA sets national standards

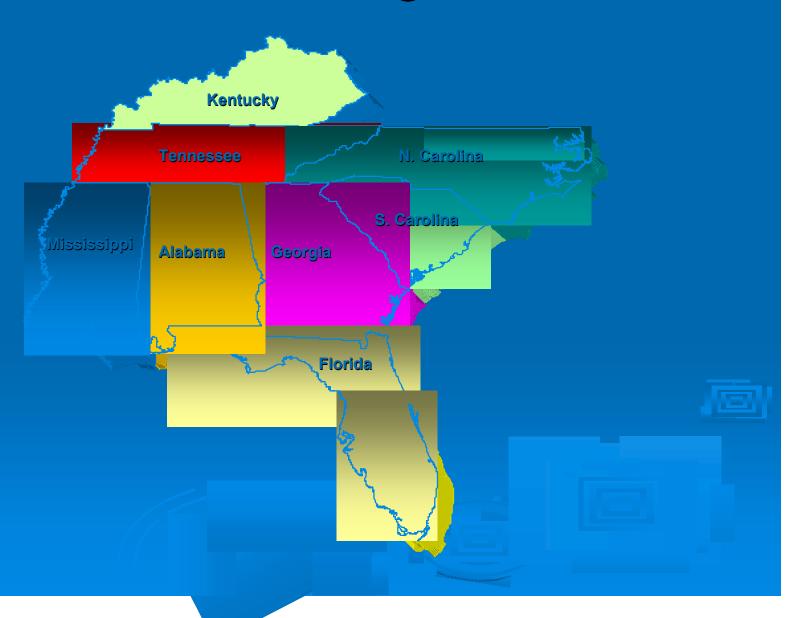


United States Environmental Protection Agency (EPA)





U.S. EPA Region 4





Origins of Superfund

CERCLA: Comprehensive Environmental Response Compensation and Liability Act (Superfund)

Became law in 1980 Amended in 1986



Origins of Superfund

"Reactive" law, addressing previously contaminated sites

Established in response to disasters like Love Canal, NY and Valley of the Drums, KY



CERCLA

CERCLA provides authority for the federal government to respond to releases or threatened releases of hazardous substances



National Contingency Plan

- National Contingency Plan (NCP) is the set of implementing regulations – "rules"
- procedures for conducting CERCLA response actions
- establishes the risk level that triggers clean up action



CERCLA at Federal Facilities

Executive Order 12580 (1987):

- delegates to DOE and DoD the responsibility to implement certain provisions of CERCLA
- makes DOE and DoD the "lead agency"
- Federal facilities must follow policies and procedures as spelled out in the NCP



CERCLA at Federal Facilities

Federal Facilities (DoE, DoD, etc.) are subject to CERCLA requirements similar to private entities

National Priorities List Current Sites (excludes 48 deleted sites) ★ SAA (18 of 28 in Potential EJ Areas) ■ NPL (95 of 167 in Potential EJ Areas) **Planned Site Listing** ▲ FY 10 (5 of 8 in Potential EJ Areas) ▲ FY 11 (12 of 14 in Potential EJ Areas)



Department of Energy Facilities in EPA Region 4

- Savannah River Site South Carolina
- Paducah Gaseous Diffusion Plant Kentucky
- Oak Ridge Reservation Tennessee
- Pinellas Plant FL (RCRA FDEP lead)







EPA Region 4 Department of Defense Facilities





34 NPL or BRAC facilities – Army, Navy, Air Force, Marines, NASA



Savannah River Site

Added to the Superfund National Priorities List – December 1989

SRS required to have a Federal Facilities Agreement (agreement with State &EPA)



Federal Statutes for Cleanup of Federal Facilities

- > CERCLA
- > RCRA
- > Oil Pollution Control Act
- Safe Drinking Water Act
- > Clean Water Act
- > Clean Air Act



SRS - Federal Facility Agreement August 1993

Three party agreement (DOE, EPA, SCHEC)

- Governs investigation and remediation program
- Roles and responsibilities of each party
- Schedules and deadlines
- Enforceable milestones, penalties
- Procedures to working together
- Dispute resolution



EPA's Role

- Oversight of remedial actions at SRS
- Ensure adherence to the NCP, CERCLA, FFA, guidance
- Technical and procedural assistance
- Information, guidance, training



EPA's Role

EPA and SCDHEC concurrence required:

- Select of remedies (Record of Decision)
- Implement remedies
- Operate remedies
- Determine success of remedies

Involvement – early & often –

- Process leading up to selecting remedies
- Designing and installing remedies
- Monitoring and evaluating effectiveness of remedies



EPA SRS Team

- > James Barksdale RPM
- Martha Berry RPM
- Cathy Amoroso RPM
- > Rachel Hall RPM
- Rob Pope RPM & FFA Manager



EPA SRS Team Support

- Health Physicist (Jon Richards)
- Hydrogeologists (Ben Bentokowski, Kay Wischkaemper)
- Risk Assessor (Tim Frederick)
- Attorney (Brian Thompson)
- SJTI, tracking (Carolyn Haugabook)
- Community Involvement (Kyle Bryant)
- > Health Physics (U.S. Army Corps of Engineers)
- TechLaw Regional Oversight Contract
 - Document Review, Field Oversight, Meeting Support



EPA Decision Process:

RPM level (Rachel, Jim, Martha, Cathy, Rob)

- EPA RPM involved in remedial process === via the Core Team and Scoping process
 - Collaborate sampling and monitoring plans
 - Conduct site visits and inspections, field oversight
 - Review data
 - Review documents
 - Comment on documents and resolving issues
 - Ensure adherence to NCP, EPA guidance
 - Participate in meetings, teleconferences, team work
 - Consider public input
- > EPA RPM integral in identifying preferred remedy(ies)



EPA Decision Process: EPA Management Level

- > EPA Management and EPA HQ:
 - consider proposed remedies
 - ensure national consistency and adherence to NCP, national guidance
 - ensure that plan has State concurrence
 - give approval to proceed with Proposed Plan
- ➤ EPA RPM represents the SRS Core Team's decisions



EPA Decision Process: Superfund Division Director

- Proposed Plan issued to the public
- DOE writes the Record of Decision, considering public comments (core team participation)
- DOE signs the Record of Decision
- > EPA signs the ROD
- > SCDHEC signs the ROD



- > Ensure remedy is:
 - designed and constructed according to plan
 - achieving the objectives outlined in the ROD
 - protective of human health & environment
- Regular effectiveness monitoring
- 5 Year Remedy Reviews
 - EPA management and HQ involved in findings, and follow-up to 5-year reviews



Three Party Decisions

Decision Documents "belong" to DOE, SCDHEC and EPA

EPA must sign a ROD for it to be final per the requirements of the NCP



Collaboration

- Team work approach employed to ensure meeting all FFA requirements while streamlining and accelerating process
 - Core Team
 - Scoping meetings
 - Design teams special topics
- Requires dedication and commitment from each of the three parties



Current Activities and Projects

- > FFA commitments
- Design team & Protocols
- > M Area
- P Area (Reactor)
- > D Area
- T Area (TNX)
- R Area (Reactor)
- > Gun Sites
- > ECODS
- > A Area Units
- Integrator Operable Units

- High Level Waste Tanks
- LLWD Facility (E Area)
- > HWCTR
- > CMP
- L Area Groundwater
- Land use controls
- Deer Study
- > D&D
- > 5 year remedy reviews
- Field oversight
- > CAB



FY2010

- Design team: sampling & analysis plans
- M Area: PER
- P Area: 2 Action Memos, RI Complete, ROD, ESD, RA start, LUCIP, EMplan
- D Area: 3 Action Memos, de-tritiation treatability study, ROD
- T Area (TNX), treatability study
- R Area: Removal start & complete, 4 action memos, 1 early action ROD, PP
- A Burning Rubble Pit/Rubble Pile, A Ash Pile & MCB/MBP: 2 RA completions
- C Burning Rubble Pit: RA Start
- HWCTR: action memo
- L Area SGW: effectiveness monitoring report, construction report
- L Area NGW: RI start and complete, Proposed Plan
- A Area Misc Rubble Pile: PER
- > A Area Waste Units: RI scoping
- > F Tank Farm: performance evaluation

- K, L, P BRP/RPs: gw monitoring report
- ECODS: RI complete, ROD, RA start, LUCIP
- > SATA
- Gunsite 012: RI complete, Action Memo, Proposed Plan
- > Gunsite 218: RI, Proposed Plan, ROD
- E Area: Interim ROD, ESD
- > HWCTR
- > CMP: EMR
- C, K, L reactors LUCIPs
- Deer Cesium Study
- > Pen Branch IOU: periodic report
- Community Involvement Plan
- ALL HAVE ASSOCIATED EE/CAs, Risk Assessments, PPs, FS, white papers, etc.



High Level Waste Tanks

- > 22 non-compliant tanks to be closed by 2022
- > 2 tanks were closed in 1997
- > Tanks 18 & 19 scheduled to close 12/31/2012
- Two more tanks must achieve bulk waste removal by 9/30/10
- Individual tank closure per South Carolina regulations using Closure Modules
- Tank Farms are CERCLA OUs that will have RODs
- Tank closure milestones in FFA subject to dispute if missed



HLWT (continued)

- DOE prepares a Performance Assessment for each tank farm - EPA,SCDHEC,NRC comment
- Each tank farm also will have a General Closure Plan under the State WW permit
- SCDHEC is the lead for tanks up to the PP
- EPA reviews and issues comments to SC on tank documents up to PP



HLWT (continued)

- A Proposed Plan and Interim ROD is planned for each tank farm - individual tanks will be added to Interim ROD via an ESD as the tanks close and exit the SC WW Permit
- Regulation of the tanks is complex
- EPA is committed along with DOE and SCDHEC to close the tanks and eliminate the threats associated with the liquid waste

Superfund Job Training Initiative



The United States Environmental Protection, Agency Headquarters funded the SRS-SuperJTI through the TASC Award. EPA Region 4 provided meeting support to the SRS-SuperJTI by funding contractor support under ROC.

The United States Department of Energy, supported the SRS-SuperJTI though assisting in the development and implementation of the program and overseeing the participation of DOE contractors.



SRS

SRS, the facility at which the SRS-SuperJTI was developed for and where the graduates would work.



Pausons, a DOE contractor, provided support throughout the entire SRS-SuperJTI. Mock interviews were also conducted by Parsons during Phase 3 of the program.



SRR, a DOE contractor, committed to 42 full-time, permanent radiological control inspector and operators



OAI, Inc., a sub-contractor to E', provided the backbone to the program initiative and lessons learned from previous job trainings that were developed and implemented through their curriculum.





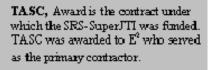
DSS Provided support to the initiative by educating and recruiting community partners and candidates from the Allendale County area.



SRNS, a DOE contractor, committed to 20 full-time, permanent material handler and operator positions.



E², Inc., a contractor to EPA Headquarters, established and implemented the SRS-SuperJTI model.







Denmark Technical College, provided the facility for the technical portion of the program.



The Imani Group, served as the community partner and was sub-contracted by E^2 .



Questions

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